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01/08/02

PTO/SB/05 (12/97)  
Approved for use through 9/30/00 OMB 0651-0032  
Patent and Trademark Office U S DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

SJO92000145US1

Total Pages

34

First Named Inventor or Application Identifier

Tsann Lin

Express Mail Label No.

ET155169940US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form  
(Submit an original, and a duplicate for fee processing)
2. ☒ Specification (Total Pages) 25  
(Preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Application
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
3. ☒ Drawing(s) (35 USC 113) (Total Pages) 7
4. Oath or Declaration (Total Pages) 2
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation /divisional with Box 17 completed)  
[Note Box 5 below]
  - i. ☐ DELETION OF INVENTOR(S)  
Signed statement attached deleting inventor(s) named  
in prior application, see 37 CFR 1.63(d)(2) and  
1.33(b)
5. ☐ Incorporation by Reference (useable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy  
of the oath or declaration is supplied under Box 4b is considered  
as being part of the disclosure of the accompanying application  
and is hereby incorporated by reference therein.

ADDRESS TO: Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

6. ☐ Microfiche Computer Program (Appendix)
7. Nucleotide and/or Amino Acid Sequence Submission (if applicable,  
all necessary)
  - a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identify of above copies

## ACCOMPANYING APPLICATION PARTS

8. ☒ Assignment Papers (cover sheet & document(s))
9. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney
10. ☐ English Translation Document (if applicable)
11. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
12. ☐ Preliminary Amendment
13. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
14. ☐ Small Entity Statement filed in prior application,  
Statement(s) Status still proper and desired
15. ☐ Certified Copy of Priority Document(s)  
if foreign priority is claimed)
16. ☒ Other Express Mail Certificate

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

## 18. CORRESPONDENCE ADDRESS

- ☐ Customer Number or Bar Code Label \_\_\_\_\_  
☐ Or Correspondence address below

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CITY	Salt Lake City	STATE	Utah	ZIP	84101
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Assignee Name: INTERNATIONAL BUSINESS MACHINES CORPORATION

Assignee Residence: Armonk, New York

Please type a plus sign (+) inside this box → +

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<h2 style="margin: 0;">FEE TRANSMITTAL</h2> <p style="font-size: small; margin-top: 10px;">Note. Effective October 1, 1997. Patent fees are subject to annual revision.</p>		<b>Complete If Known</b>	
		Application Number	Not yet assigned
		Filing Date	January 4, 2002
		First Named Inventor	Tsann Lin
		Group Art Unit	
		Examiner Name	
TOTAL AMOUNT OF PAYMENT	\$ 1008.00	Attorney Docket Number	SJO920000145US1

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)																																																																																																																																																																												
<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to.</p> <p>Deposit Account Number <u>09-0466</u></p> <p>Deposit Account Name <u>IBM CORPORATION</u></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17      <input type="checkbox"/> Charge the Issue Fee in 37 CFR at the Mailing of the Notice of Allowance</p> <p><input type="checkbox"/> Payment Enclosed</p> <p><input type="checkbox"/> Check    <input type="checkbox"/> Money Order    <input type="checkbox"/> Other</p>	<h3 style="margin: 0;">3. ADDITIONAL FEES</h3> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2520</td><td>147</td><td>2520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1840*</td><td>113</td><td>1840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1510</td><td>138</td><td>1510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - intentional</td><td></td></tr> <tr><td>141</td><td>1280</td><td>241</td><td>640</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1280</td><td>242</td><td>640</td><td>Utility issue fee</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>40</td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td colspan="6">Other fee (specify) _____</td></tr> </tbody> </table>	Large Entity		Small Entity		Fee Description	Fee Paid	Fee Code	Fee (\$)	Fee Code	Fee (\$)	105	130	205	65	Surcharge - late filing fee or oath		127	50	227	25	Surcharge - late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2520	147	2520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1840*	113	1840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	400	216	200	Extension for reply within second month		117	920	217	460	Extension for reply within third month		118	1440	218	720	Extension for reply within fourth month		128	1960	228	980	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1510	138	1510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive - intentional		141	1280	241	640	Petition to revive - unintentional		142	1280	242	640	Utility issue fee		143	460	243	230	Design issue fee		144	620	244	310	Plant issue fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional applications		126	180	126	180	Submission of Information Disclosure Stmt		581	40	581	40	Recording each patent assignment per property (times number of properties)	40	146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))		149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))		Other fee (specify) _____					
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SUBMITTED BY				Complete (if applicable)	
Typed or Printed Name		Brian C. Kunzler		Reg Number	38,527
Signature				Date	Jan 4, 2002
				Deposit Account User ID	

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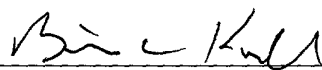
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Date of Deposit: January 4, 2002

I hereby certify that this patent application in the name of Tsann Lin and Daniele Mauri for A SPIN-VALVE SENSOR WITH PINNING LAYERS COMPRISING MULTIPLE ANTIFERROMAGNETIC FILMS, together with the drawings, a Declaration, Power of Attorney, and Petition, an Assignment and Recordation Form Cover Sheet, Information Disclosure Statement, PTO Form 1449, and Copies of Cited References are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Respectfully submitted,

  
\_\_\_\_\_  
Brian C. Kunzler  
Reg. No. 38,527  
Attorney for Applicant

Date: January 4, 2002

Brian C. Kunzler, P.C.  
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Salt Lake City, Utah 84101  
Telephone: 801/994-4646